WHAT IS CLAIMED IS:

1. A liquid crystal display with two opposing substrates sandwiching therebetween a liquid crystal layer variable in thickness either within a single pixel or from one pixel to another, wherein

there are provided columnar spacers between the two substrates where the liquid crystal layer is thinnest, the columnar spacers being elongated in a direction connecting the two substrates to maintain a cell gap.

2. The liquid crystal display as defined in claim 1, wherein:

one of the two substrates is provided with liquid crystal drive electrodes composed of reflection electrodes and transmission electrodes;

an interlayer insulation layer is provided on the substrate where the liquid crystal layer is thinnest; and

the reflection electrodes are provided on the interlayer insulation layer.

3. The liquid crystal display as defined in claim 2, wherein

the reflection electrodes have a surface composed of an undulating part where incident light is scattered and

a flat part which the columnar spacers contact.

4. The liquid crystal display as defined in claim 2, wherein

the liquid crystal layer has the largest thickness equal to a sum of a height of the columnar spacers and a thickness of the interlayer insulation layer.

5. The liquid crystal display as defined in claim 1, wherein:

there are provided a color filter layer and a black matrix layer on one of the two substrates; and

the columnar spacers are provided on the black matrix layer.

6. The liquid crystal display as defined in claim 5, wherein

the columnar spacers are provided on blue filters in the color filter layer.

7. The liquid crystal display as defined in claim 5, wherein

the black matrix layer has apertures in which the columnar spacers are provided.

8. The liquid crystal display as defined in claim 5, wherein

the columnar spacers are black.

9. The liquid crystal display as defined in claim 1, wherein

the liquid crystal layer is made of a material exhibiting vertical alignment.

10. The liquid crystal display as defined in claim 1, wherein:

in a cross-section of a panel taken parallel to the two substrates, the columnar spacers account for 0.05 % to 3.0 % of the panel in area.

11. A manufacturing method of a liquid crystal display, comprising the steps of:

providing a transparent electrode on a substrate to drive liquid crystal;

providing columnar spacers on the transparent electrode; and

providing an alignment layer on the entire substrate.

12. A manufacturing method of a liquid crystal display,

comprising the steps of:

providing a transparent electrode on a substrate to drive liquid crystal;

providing an alignment layer on the transparent electrode;

rubbing the alignment layer; and

providing columnar spacers on the rubbed alignment layer.

13. A manufacturing method of a liquid crystal display, comprising the steps of:

providing a black matrix layer on a substrate;

providing a color filter layer;

providing apertures on the black matrix layer; and

providing columnar spacers in the apertures, using the apertures as a mask.

14. The manufacturing method of a liquid crystal display as defined in claim 13, wherein

the columnar spacers are provided in the apertures by applying a photosensitive black material and illuminating the material from a side where the color filter layer is not provided.